ESSAY 9

SoCal BRIDGE Collaborative: Across Treatment Disciplines

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Although I only had an opportunity to interact with Dr. Singh very briefly, those who knew him well and with whom I have worked since that time have created a colorful and inspirational profile that has touched my life. He died before I completed my contribution to Plural's Here's How series, which recognizes the significance of clinical experience as well as research. Spirits such as his inspires writers to reach beyond the familiar and value instinct, intuition, and perception. Dr. Singh's commitment to nurture new authors and his recognition that clinically driven research is worthy of respect leaves me wishing I had gotten to know him. I am, however, grateful for this opportunity to contribute to a testimony to his endeavors, and share his passion for clinical application of research. My collaboration with research psychologists, Aubyn Stahmer, PhD, and Lauren Brookman-Frazee, PhD, has broadened the scope of my work as an SLP, which reflects Dr. Singh's vision.

—KLS

One of the major challenges facing our field today is the translation of evidence-based practices into clinical care in a manner that is both effective and fits the needs of the children and families with whom we work. Collaboration among stakeholders, including researchers, clinicians, families, and funders is essential to translational efforts, but can be very challenging. In this essay, we discuss theoretical rationales supporting such collaboration, and provide an example of an effective and productive model of working together that has led to improved care for children and families in our community.

TRANSLATIONAL SPEECH-LANGUAGE THERAPY AND COMMUNITY-BASED PARTICIPATORY RESEARCH IN EARLY INTERVENTION

To maximize therapeutic efficacy, scientific research outcomes must be translated into practical and functional application (National Institute of Health, 2011). The time it takes to do this can often be frustrating to therapists

who are seldom aware of the time and resources involved in the research process needed before an intervention becomes publicly available. It often takes 10 to 20 years for research findings to be translated reliably into clinical practice (U.S. Department of Health and Human Services Public Health Service, 2001), which is clearly too slow a pace for families involved in early intervention (EI).

Scientists are beginning to recognize the value of translational research, which is a bi-directional exchange of information between researchers and clinicians (National Institute of Health, 2011). This process can expedite the access to functional and evidenced-based interventions for children with developmental delays who need immediate treatment and can improve the research process as well. There has been a call for an exchange of knowledge involving active partnership at all stages of the research-to-practice transfer process between researchers and community stakeholders, including clinicians, parents, and funders (Addis, 2002; Beutler, Williams, Wakefield, & Entwistle, 1995; Wells & Miranda, 2006). This collaborative approach to establishing a research and functional foundation for evidence-based practices (EBP) that values the perspectives, experience, and skills of all participants is particularly relevant to EI speech-language therapists who work closely with parents (Figure 9–1).

With the progressive increase in prevalence of developmental delays (Boyle et al., 2011), including autism spectrum disorders (ASD), techniques that require expensive training have multiplied. Many agencies race to ensure that their therapists are certified in the latest program, some of which have popular marketing and name recognition, but not necessarily a sound empirical basis. It is often difficult to determine when research trumps clinical instinct or, conversely, when commercial hype distorts the value of a truly innovative approach (Searcy, 2012). Therapists struggle

Figure 9–1. *Evidence-based practice (EBP)*

to find an effective way to integrate empirical data with family, therapeutic values, and experience (Dollaghan, 2004; Guyatt, Meade, Jaeschke, Cook, & Haynes, 2000), as well as interpret the frequently abstract language of the research itself. Ideally, intervention for young children with communication disorders should match empirically based techniques to individual parent-child dynamics and cultural differences, as well as to therapist style, intuition, and experience.

One method of promoting EBPs and maximizing collaboration between researchers-therapists, therapists-therapists and therapists-parents is through community-based participatory research (CBPR) (Israel, Eng, Schulz, & Parker, 2005), which has the potential to integrate research and practice at all levels of intervention development, and the testing of methodology (Brookman-Frazee, Stahmer, Searcy, & Feder, submitted). CBPR specifically supports efforts to implement evidence-based practices in community-based settings (Jones & Wells, 2007), and values the clinical knowledge of the therapist and the input of families.

THE BRIDGE COLLABORATIVE: AN EARLY INTERVENTION CBPR

The diagnosis of ASD has increased at an astounding rate, due in part to increased access to early intervention, improved screening tools, and heightened community awareness. Therapists working with this unique population have become increasingly aware of the need to identify children at risk as quickly as possible, although eligibility criteria and treatment techniques have not traditionally been clearly defined for infants and very young toddlers.

As the general public becomes more aware of ASD, many speech-language therapists are becoming overwhelmed by the numbers of families with young children entering their practices and considered at-risk for ASD. Very young children, however, are not always found eligible for treatment, with funding agencies struggling to find ways to catalogue their needs. Growing requests for services at local funding agencies, in community service settings, and even in research settings led us to form a group to examine possible models for a community-wide collaboration that would build capacity for preventative interventions appropriate for infants/toddlers at risk for autism and their families in our community.

Composed of more than 15 community members, including parents, providers, researchers, and funding agency representatives, this collaborative began meeting formally in 2007 and continues to meet monthly. In order to enhance visibility and impact in the community we named ourselves the SoCal BRIDGE Collaborative to signify the bridge we were building between research and practice, and to represent our identified early intervention values: **B**ond-**R**egulate-**I**nteract-**D**evelop-**G**uide-**E**ngage). Our mission statement became *"to build a community dedicated to improving the earliest intervention for children with challenges in relating and communicating,"* with a primary objective to bridge the gap between research and practice. The challenges we faced included moving what we knew about ASD from research into the community at a fast enough pace to keep up with the growing numbers of at-risk children, to identifying interventions that effectively addressed the individual needs of families, and to maximizing the use of EBP in the community.

The BRIDGE Collaborative rapidly became a research-community partnership based on the CBPR framework that brought together a trans-disciplinary team. In 2009 we received funding from National Institute for Mental Health (NIMH) to select an evidence-based intervention to adapt for implementation in the community for 12- to 24-month-old children at risk for disorders of relating and communicating, such as ASD.

Selecting a Model Program

Our first step was to determine what we were looking for in an intervention (Stahmer et al., 2011 for a complete description of the process) and we achieved consensus on the following elements: parent-implemented; brief/short-term treatment; appealing to many therapists and parents (behavioral/developmental combination); evidence-based for early intervention; practical in terms of community resources and need; and met community values. These elements included a parent-implemented focus, introducing a brief/short-term treatment timelines, appeal to many therapists and parents (behavioral/ developmental combination), a strong evidence-base for early intervention, being practical in terms of community resources and need, and finally that it meet community values.

After reviewing more than 20 programs, the collaborative narrowed the field to three highly respected treatment models. To obtain community input, we hosted three, half-day

conferences at which the developer of each approach presented their program to our selected focus groups, as well as to collaborative members and the public.

Focus Groups

The collaborative identified two groups of community members to participate in the final selection: parents who had been through the early intervention system; and providers who worked with early intervention families. Ten participants were selected for each of the two focus groups. They were first asked to develop a list of priorities for an early intervention treatment program, including the strengths and weaknesses of those currently available in our community (Table 9–1).

Table 9–1. Questions to Stakeholders

Valued Components of Early Intervention Programs
1. What factors do you consider when choosing services to provide to children with risk for ASD between ages 12 to 18 months?
2. What are your thoughts on the efficacy of early intervention services specifically for children with risk for ASD between ages 12 to 18 months?
3. How are parents involved/included in services you currently provide to children with risk for ASD ages 12 to 18 months?
4. What do you like about existing early intervention services for children with risk for ASD ages 12 to 18 months?
5. How might existing services be improved?
6. Do you see gaps or limits in current services?
7. What would the "ideal" intervention for children with risk for ASD ages 12 to 18 months and their families look like?

Immediately following each conference, facilitators met separately with both focus groups to obtain feedback on each intervention and collaborative members met the presenters to clarify specific points, including: process and cost for training; flexibility for adaptation; ongoing training options; and available training materials for therapists and for parents.

Final Selection

Analysis of the focus group feedback indicated substantial overlap between parent and provider perspectives (Table 9–2). Both groups believed in the importance of an early start to intervention that should be both individualized and comprehensive. Both stated that interventions must be evidence-based; however, they were more influenced by the intervention presenters' method of presenting evidence than the scientific strength of the evidence given. Parents and providers did have some areas where their focus differed. Parents wanted flexibility in choosing their provider, opportunities to include siblings in the intervention, and more support in understanding and navigating services. Providers wanted comprehensive training, including on-going supervision, and coaching. Analysis of the focus group responses (see Table 9–2) revealed significant overlap between what researchers, parents and providers were looking for in a treatment design (Searcy, 2012; Stahmer et al., 2011).

The collaborative reviewed the community input and the elements previously identified as important in an early intervention program. A specialist in consensus-building helped objectify what was quickly becoming an emotional process: some of us felt strong connections to one program, whereas others were torn between two or all three. Although elements of all three intervention programs were highly respected, our group selected one model as the best fit for our identified

Table 9–2. Values Identified by SoCal BRIDGE Focus Groups

Parents	*Providers*
Early identification	Earlier the better
Accessible	Accessible
Intervention fits family needs	Family-focused collaborative process
Proactive, engaging provider with background in autism	Experiential training & ongoing support for provider
Efficient	Efficient
Evidence-based	Evidence-based
Parent involvement	Parent/family involvement
Collaborative	Comprehensive
Comprehensive	Support for parents
Parent support	Engaging/Fun
Effective	Play-based
	Individual & group
	Culturally relevant

needs. The process was a little like *American Idol*, with some of us grumbling under our breaths but everyone agreeing in the end that the selection was fair (Searcy, 2012).

Project ImPACT (Improving Parents as Communication Teachers-PI; Ingersoll & Dvortcsak, 2010) was selected, in part because it was recognized as a blended program that teaches families naturalistic developmental and behavioral intervention techniques to increase their child's social and communication skills. Another feature of *PI* was that it included both a therapist manual and a parent manual with specific guidelines for implementation.

Pilot Program

After selecting *PI*, 10 therapists from multiple disciplines at agencies participating in BRIDGE (at least 4 being speech-language pathologists), were selected for training. BRIDGE members served as supervisors. The pilot study would follow these therapists as they learned the intervention and implemented *PI* with families in the community.

As *PI* was originally designed for older children, training included treatment enhancements developed by BRIDGE members to address those areas identified as unique to our younger population (parent/child relationship; sensory issues; reflective supervision). The process of developing the enhancements required a great deal of cross-discipline collaboration to determine the most important aspects to cover, as well as coordination with the program developer and research team to ensure the integrity of the intervention. In the end, we achieved the art of blending our philosophical approaches, because we actually listened to each other, had

a history of working together toward a common goal, and began to recognize the value of our open collaboration (Searcy, 2012).

OUTCOMES TO DATE

Collaborative Outcomes

To ensure that our collaborative is sustainable, we have been careful to monitor our interactions. We assess group process through monthly check-in at meetings and quarterly surveys of members. Thus far, a majority report on partnership process surveys indicated that the amount of trust between BRIDGE members had grown (90%) and our capacity to work together had increased (70%). Ratings of trust, collaborative decision-making, and the value of the research team to community programming are consistently rated positively by over 80% of the members. All members who began with the group have remained active participants, and 100% of agencies have committed to ongoing participation, indicating good sustainability of the collaborative.

Therapist, Child, and Family Outcomes

Eight out of ten therapists met fidelity (indicating that they had implemented the treatment as intended). One did not complete the program because of maternity leave, and the Health Maintenance Organization's therapist data were not available. Ninety percent of the therapists have reported confidence in their use of strategies, liked the materials and format, and would recommend the program.

A total of 13 families have completed intervention. The average age of children at entry is 16 months. Data indicate increases in communication scores on standardized assessments and improvements in parent/child interaction for 90% of children. Eighty percent of parents met fidelity of implementation criteria by the end of intervention. Families rated the intervention, materials, and therapists very positively. The BRIDGE Collaborative achieved and maintained interdisciplinary, interagency, and research-clinician collaboration. It also provided direct examination of treatment techniques for very young children at risk for communication and social-relating disorders such as autism at a very early age. This parent-implemented intervention is still being used in our community.

NEXT STEPS

The current focus of our research includes examining the longer term sustainability of the BRIDGE collaborative model to implement an evidenced-based program (EBP) for infants and toddlers at-risk for ASD. It is hypothesized that the BRIDGE model can be successfully adopted and replicated in a new community with high acceptability, penetration of collaboration, shared leadership, and shared decision making (Brookman-Frazee et al., submitted)

The BRIDGE Collaborative is currently focused on the next step in their program development, including working with new funding agencies, developing improved training methods (including designing a training manual for parents and therapists specific to infants at risk for autism), and expanding to outside new communities.

LESSONS LEARNED

Collaboration among disciplines allows therapists and researchers to speak a universal language, minimize use of jargon, provide a

more cohesive and comprehensive program for children, and meet extensive and diverse family needs (Brown, Amwake, Speth, & Scott-Little, 2002; Bruner, 1991). Collaboration with parents maximizes generalization of skills across environments. Collaboration between researchers, funding agencies, parents, and therapists promotes development of more functional programs that can be implemented with greater speed than isolated research allows.

Long-term benefits of collaboration are found in the development of relationships, rather than in the achievement of the goals themselves (Huxham, 2003), and treatment agencies have documented improved clinical skills in their staff after they have participated in research projects. Similarly, clinicians report that these collaborative experiences have provided significant professional enrichment, often more powerfully than attending isolated workshops or continuing education courses. Just as parents are more apt to alter their manner of communication and interaction with their young children when they are directly involved in the treatment process, therapists may more eagerly integrate new techniques when they are integrally involved in the development of those techniques.

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